

XEINOSTOMA INOPINATUM SP. NOV., A NEW CRAB
FROM RÉUNION ISLAND, SOUTH INDIAN OCEAN
(CRUSTACEA: BRACHYURA: CYCLODORIPPIDAE: XEINOSTOMATINAE)

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Abstract

Tavares, M., 1994. *Xeinostoma inopinatum* sp. nov., a new crab from Réunion Island, south Indian Ocean (Crustacea: Brachyura: Cyclodorippidae: Xeinostomatinae). *Memoirs of the Museum of Victoria* 54: 121–123.

Xeinostoma inopinatum sp. nov., the second Indian Ocean species and fourth representative of the genus is described from four specimens collected during the Oceanographic Cruise MD32/La Réunion 1982, conducted off the coast of Réunion I., Indian Ocean, in depths between 165 and 750 m. The new species is compared with *X. eucheir* Stebbing, 1920, from South Africa and Madagascar, the type species of the genus.

Introduction

The Indo-West Pacific species of the family Cyclodorippidae Ortmann, 1892 were recently reviewed by Tavares (1991, 1992a, b, 1993). Twenty-three species are included in seven genera, all but *Corycodus* exclusively Indo-Pacific: *Tymolus* Stimpson, 1858; *Corycodus* A. Milne Edwards, 1880; *Genkaia* Miyake and Takeda, 1970; *Xeinostoma* Stebbing, 1920; *Krangalan-gia* Tavares, 1992; *Ketamia* Tavares, 1992 and *Phyllotymolinum* Tavares, 1993.

Until now, three species of *Xeinostoma* were known: *X. eucheir* Stebbing, 1920, from South Africa and Madagascar, *X. sakaii* Tavares, 1993 from Japan and the Philippines, and *X. richeri* Tavares, 1993 from Chesterfield and Loyalty Islands. The examination of additional material from the Indian Ocean collected during the Oceanographic Cruise MD32/La Réunion 1982, revealed the presence of an undescribed species from the Réunion Island, between 165 and 750 m deep. This new species is described here as *Xeinostoma inopinatum*.

The terms used in the description are those used by Tavares (1991). Measurements are of carapace length followed by carapace width (measured at the widest point, anterolateral tooth included) in millimetres. All the type material is deposited in the Muséum national d'Histoire naturelle, Paris (MNHN), except for one male paratype which is in the carcinological collection of the Universidade Santa Ursula, Rio de Janeiro (USU). *Xeinostominae*, incorrect original spelling, is corrected to *Xeinostomatinae*.

Xeinostoma inopinatum sp. nov.

Figure 1a–c

Material examined. Holotype. South Indian Ocean. MD32/La Réunion 1982 stn FA96: 19°41.5'S, 54°8.3'E, 350–750 m, 28 Aug 1982, MNHN-B 22662 (female, 4 x 4.5 mm).

Paratypes. MD32/La Réunion 1982 stn DS176: 21°1.7'S, 55°10.6'E, 165–195 m, 5 Sep 1982, MNHN-B 22663 (2 males, 2.5 x 2.7 mm, 3.8 x 4.0 mm); USU 406 (1 male, 2.4 x 2.6 mm).

Etyymology. The specific name is Latin, unexpected.

Description. Carapace subcircular with dorsal face flat; widest point at level of anterolateral tooth. Limits between dorsal face and lateral walls of carapace weak. Front semicircular, bordered by small teeth. Fronto-orbital width greater than half maximal breadth of carapace. Frontal, gastric and cardiac regions covered with minute granules. Hepatic and branchial regions paved with rounded granules. Frontal region slightly depressed medially. Gastric pits inconspicuous. Gastric and cardiac regions outlined laterally by gentle furrow. Anterolateral tooth well developed and ornamented with small spines.

Exorbital tooth prominent and granulated. Orbits deeply excavated with superior and inferior margins well delimited; superior border wide, convex medially, notched at angle with frontal border. Eyestalk mobile, rather slender and bearing few granules. Antennule about half carapace length.

Prostomial chamber not reaching frontal

border of carapace. Exopod of second and first maxillipeds bearing large flagellum. Exopod of third maxilliped lacking flagellum.

Cheliped strong, armed with truncate tubercles and spines; internal margin of carpus with short triangular projection ending in 3 small spines. First and second walking legs similar, dactyli laterally compressed. Fourth and fifth pereopods very short and subdorsal, both with curved dactyli.

Female abdomen with 6 segments extremely narrow compared to carapace width. Sixth abdominal segment about twice as long as wide. In females, first pleopod vestigial and uniramous, inserted on ventral face of abdominal segment. Pleopods 2–5 biramous and articulated on

lateral end of abdominal segments 2–5. Male abdomen of 5 segments.

Distribution. Known only from Réunion Island, south Indian Ocean, 165–750 m.

Remarks. *Xeinostoma inopinatum* sp. nov., is the second Indian Ocean species and the fourth representative of the genus. The following characters distinguish this new species from *X. eucheir*:

1, carapace with small and regularly distributed granules which are more strongly developed laterally (fig. 1a), while in *X. eucheir* the frontal (borders excepted), mesogastric and metagastric regions are smooth and the granules that cover the carapace are coarse (fig. 1d);

2, widest point of the carapace is at the level of

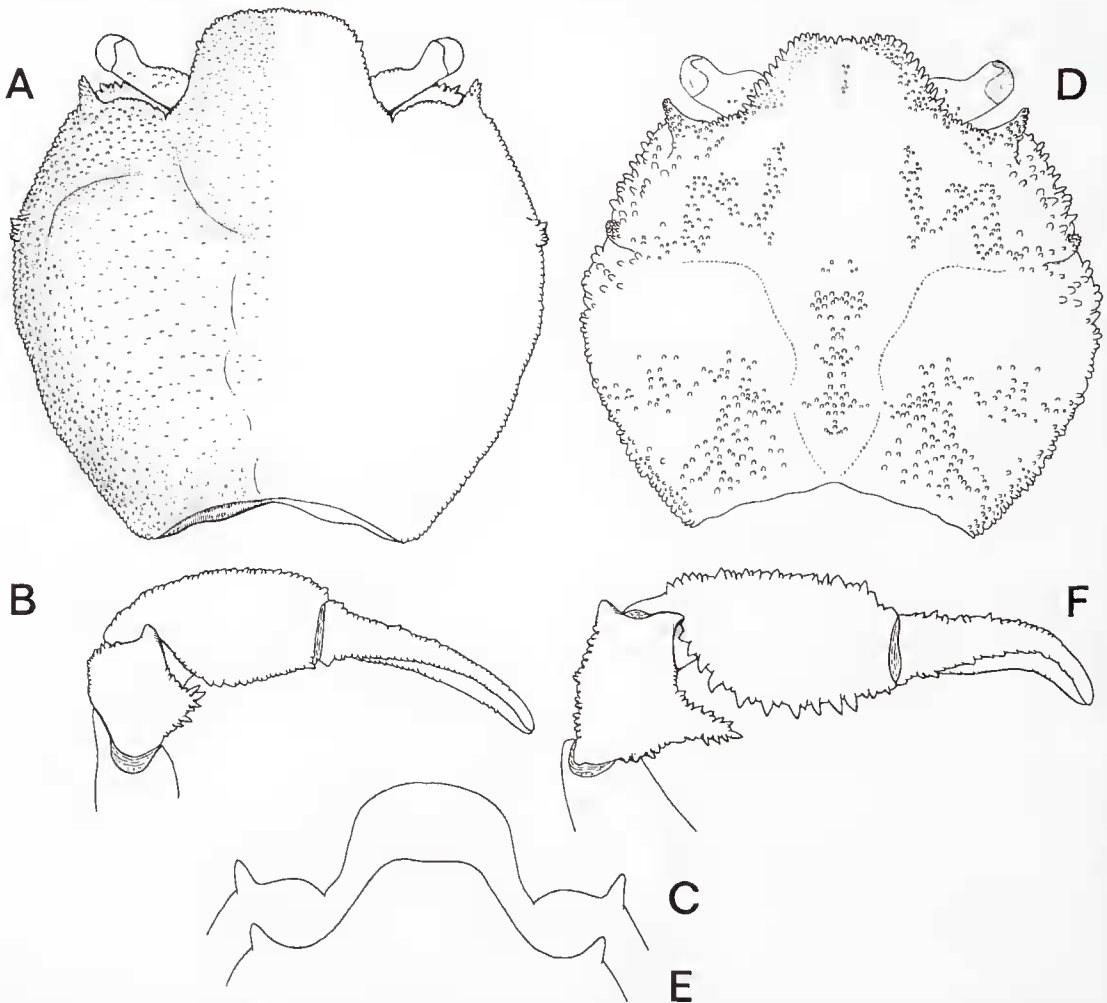


Figure 1. a—c. *Xeinostoma inopinatum* sp. nov., holotype (4 x 4.5 mm). d, e. *Xeinostoma eucheir* Stebbing, 1920. South Africa, Cape Vidal, 144 m: male lectotype, 6.6 x 7.7 mm (BM 1928.12.1.195–196). f. *Xeinostoma eucheir* Stebbing, 1920. Madagascar, Vauban, 12°40'S, 48°18'E, 205–185 m: male 6.9 x 8.0 mm (MNHN-B 24596).

a, d, dorsal view of the carapace; b, f, outline of left cheliped; c, e, outline of fronto-orbital region of carapace.

the anterolateral tooth (fig. 1a), while in *X. eucheir* it is behind the anterolateral tooth (fig. 1d);

3, superior border of the orbit is wide, convex, and notched at the angle with the frontal border of the carapace (fig. 1c), while in *X. eucheir* the superior border of the orbit is narrow, concave and meets the frontal border of the carapace in a gentle curve (fig. 1e);

4, internal margin of the carpus of the cheliped with a short triangular projection ending in three small spines (fig. 1b), while in *X. eucheir* the margin of the carpus of the cheliped is armed with a very prominent triangular tooth that bears several acute spines (fig. 1f).

Among the seven Indo-Pacific genera of the Cyclodorippidae, two show a coincident distributional pattern in the south Indian Ocean: half or more of their species inhabit the same small area while their other representatives are known from a single locality outside of the Indian Ocean. Thus, three of the five species of *Corycodus* and two of the four species of *Xeinostoma* are found only in a relatively small area that includes a part of the eastern coast of South Africa near the Mozambique Channel, Madagascar and Réunion. The other species are found far away in the Caribbean and Sulu Seas (one species of *Corycodus* in each area) and Japan and New Caledonia (one species of *Xeinostoma* in each area).

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